TRANSACTIONS OF SOCIETIES.

ART. XIII.—*Summary of the Transactions of the College of Physicians of Philadelphia.*

1858, *June* 2. *Some Facts in Relation to the Nocturnal Incontinence of Urine in Children.* Dr. ADDINELL HEWSON read the following paper:—

There is perhaps no subject which practitioners deem less worthy of their attention, than that of the nocturnal incontinence of urine amongst children. By many this is considered a very trifling affection—by others as no disease whatever; and yet I am disposed to believe that there are but a few who have not been more than once baffled in their attempts to relieve it; still, a very few have ever deemed the subject worthy of close investigation, or careful study; and the majority of those who have written in relation to it have merely indulged in vague generalizations, from recollection only of what they have seen. In this way, various, and often diametrically opposite views, have been broached in regard to its nature, and a great diversity and multiplicity of remedies have been vaunted for its cure.

But these circumstances have only served to convey to my mind the conviction that there is yet much to be learned on the subject. I shall, therefore, with the view of adding something at least to our present stock of knowledge on this matter, proceed to lay before the College some facts in regard to it, which I have had the opportunity of observing, under circumstances peculiarly favourable to their thorough investigation.

In the early part of the past year (1857) I was requested by some of the managers of the House of Refuge to suggest a cure for those of the children in that institution, who were in the frequent practice of wetting the bed; on an investigation, instituted through the watchman and nurse, who furnished me with a daily record of the offenders, I ascertained that there were seventy-eight boys in the institution at that time (the latter part of January), affected with this form of enuresis. This, in a household averaging two hundred and ninety-two boys, gave an alarming proportion of cases, viz., 1 to $3\frac{75}{100}$, and invested the subject with much more importance in my mind than it had ever possessed before. I therefore determined to investigate it. For this purpose, I subjected each case to a most careful examination, and made inquiry into every moral and physical occurrence—into every hygienic and police regulation—into the diet, habits, occupations, and other circumstances which might affect these cases, either individually or collectively. The facts thus obtained were carefully recorded by me at the time, and the chief substance of them will be found in this paper.

I shall however confine myself to the consideration of sixty-three of the seventy-eight cases, as the others, fifteen, were only a short time under observation, having been discharged from the institution in the early part of the year. The cases from which my remarks will be drawn, were under my constant observation and control for a period of five months. Tables I. and II. contain abstracts of the histories of these cases. These cases (sixty-three) were very unevenly distributed in the two departments, for there were twenty-nine on the white side, and thirty-four on the coloured side of the house. But, as there was more than twice the number of white to coloured boys in the institution—the ratio for the blacks was far greater than appears above. Thus, of the whole number of boys, two hundred and ninety-two, two hundred and one were white boys, and only ninety-one were black. This would give a ratio of the diseased of 1 in 7 for the white, and 1 in 2.7 for the black. Thus, it would appear that the disease was more than twice as prevalent amongst the black as amongst the whites.

The most obstinate and inveterate case was amongst the blacks.

The average age of the whole number was twelve and one-third years, or in absolute figures twelve years four months and seventeen days.

For the white boys the average age was thirteen years; for the blacks twelve and two-thirds years, or in absolute figures, twelve years eight months and fifteen days.

The youngest affected with the disease was seven years old; the oldest eighteen.

The greatest number affected at any one age was nine, this was at the age of fourteen.

The greatest number affected at any age amongst the coloured boys was seven, at the age of fourteen. The greatest number amongst the white, at any one age, was five. This number occurred at the two ages of eleven and sixteen. The worst case (Cope) was eleven years old. But of the six worst cases out of the sixty-three, three were above eleven years of age, and two below.

The following is a table of the numbers affected at different ages:—

	White.	Black.	Total.
7 years old,	1	...	1
8 "	1	3	4
9 "	1	2	3
10 "	1	4	5
11 "	5	2	7
12 "	4	4	8
13 "	3	4	7
14 years old.	2	7	9
15 "	3	2	5
16 "	5	3	8
17 "	1	...	1
18 "	1	1	2
Unknown (young)	1	2	3
	29	34	63

The general appearance of health was good in thirty-four of the whole number; these were nineteen whites, and twenty-five blacks, and were all stout hearty boys.

Seven boys were markedly strumous. Of these seven, four were whites and three blacks.

Fifteen were thin and pallid.

Four of the (six) worst cases were stout and hearty. The worst case of all (Cope), was a remarkably stout, hearty looking boy.

The appetite was excellent in fifty-three; thirty of these were blacks, and twenty-three whites.

It was poor in ten, six whites, and four blacks; and of these ten cases, seven suffered with seat-worms; four had furred tongues, two had diarrhœa, and three suffered with constipation.

Twenty-four of the sixty-three had seat-worms (oxyuris vermicularis) making more than one-third of the whole number the subjects of this intestinal irritation. Five of the six most inveterate cases suffered from this trouble. The sixth (Galbraith) suffered from spongy gums. Seven of the white boys were suffering with ringworm (herpes circinatus), and one had the itch (scabies).

Twenty-seven of the cases had clean healthy tongues. Thirteen of these were white boys, and fourteen coloured.

Nineteen had pale, putty looking tongues. Of these eight were white, and eleven coloured.

In seventeen the tongue was coated, viz., eight white, and nine blacks.

Twenty-six had but one alvine dejection per diem. Thirteen of these were white, and thirteen blacks. Sixteen had more than one (from 2 to 4) per diem, viz., eight whites, and eight blacks.

One boy (coloured), had no control whatever over his sphincter ani.

Twenty, eight white and twelve blacks, suffered from constipation. Three of the six worst cases suffered from constipation. Cope, the worst case of all, was regular in his bowels.

Twenty-seven of the cases urinated two or three times in the day, besides emptying the bladder in the morning on rising, and in the evening on going to bed. Eighteen of these were coloured, and nine white.

Twenty-eight, sixteen whites and twelve blacks, were obliged to urinate more frequently during the day.

Three could give no satisfactory account of how often they had to go out to urinate. Four, including the coloured boy who could not retain the contents of the rectum, had no control over the bladder, and wet their clothes during the day; one of these was idiotic.

The urine was of normal colour in	46
" " very pale "	17
	63

It was acid in every one of the sixty-three cases. In four (all white boys), it was very much so, and in seventeen it was only slightly so.

The average specific gravity was 1018. Amongst the whites the average sp. gr. was 1016; amongst the blacks, 1020.

Lowest specific gravity observed was 1010 (in the urine of a coloured boy). The highest 1027 (also in a coloured boy).

The greatest number of any one specific gravity was sixteen. In these it was 1020. The range of the specific gravity for all the cases was as follows:—

Sp. gr.	White.	Black.	Total.	Sp. gr.	White.	Black.	Total.
1010	3	1	4	1021	...	3	3
1012	5	...	5	1022	1	...	1
1013	1	...	1	1023	...	2	2
1015	6	1	7	1024	...	2	2
1016	...	2	2	1025	1	1	2
1017	2	1	3	1026	...	1	1
1018	1	3	4	1027	...	2	2
1019	...	5	5	Not observed	1	2	3
1020	8	8	16		29	34	63

Uric acid was deposited	in	31	specimens.
Urate of ammonia[1]	"	8	"
Urate of soda	"	1	"
Ammonio phosp. mag.	"	1	"
		41	
There was no deposit in		22	

Twenty-one of the specimens which yielded uric acid sediment were furnished by the white boys; ten by the black. Six of those which yielded urate of ammonia were obtained from the coloured boys, and in only two specimens from the white boys was urate of ammonia found in excess. The single case of urate of soda was a coloured boy. The ammonio-phosphate of magnesia was found in the urine of a white boy. Of the twenty-two cases in which there was no deposit on cooling, seventeen were black boys, and five white.

I would state in reference to these investigations of the urine, that they were all made by myself, with the assistance of my friends Dr. G. C. Harlan, at the time the Resident of Wills' Hospital, and Dr. John Brook, of Reading, then my private pupil. The number of specimens was too great to admit of the possibility of more than a clinical examination of each one. The urine examined was voided in the morning, in my presence. Its specific gravity and chemical reaction were immediately noted, and, as soon as I could reach home with the specimens, I subjected each to a careful microscopic examination, and made also some rough attempt to determine—by chemical agents—the character of the solid constituents. It was especially necessary that these examinations should be made rapidly, in order to determine, with anything like accuracy, the presence of free uric acid, as it is well known that this acid is often set free by decomposition of its salt, within a short time after the urine has been voided.

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[1] The deposit so called by Golding Bird, but which Lehmann declares to be urate of soda.

I esteemed accuracy, in this respect, of greater importance than a more minute detail of a few of the specimens; for it would have been impossible to have made a detailed analysis of all the specimens voided at the same time; and, to have examined the cases all separately, and at different times, might have led to some error.

The prepuce and penis were discoloured, and the former much elongated as either from frequent pulling, to relieve the itching of cystic irritation, or as from masturbation in no less than forty-six cases.

	White.	Black.
These were	21	25
The organ appeared natural in twelve	6	6
" " unusually small in two	...	2
" " very large in three	2	1
	29	34

As regards the vice of masturbation, eighteen, twelve white boys and six black, confessed to being guilty. In twelve other boys, five whites and seven blacks, there was no suspicion of guilt in this; but in the remaining thirty-three, namely, twelve whites and twenty-one blacks, there was every reason to suspect them; their manner of denying the accusation, and the appearance of the genitals, tended to fix these suspicions on them.

As to the frequency with which the enuresis occurred there were only two who were guilty of it every night without intermission, these would even wet the bed more than once in a single night. Three, all whites, were found to do it six or seven times in the week, with considerable regularity. Seven, three white and four coloured, five or six times; six, three, from either colour, four or five times; six, one white and five coloured, three or four times; twelve (six of each), two or three times; ten (six white and four blacks), once or twice; twelve (five white and seven blacks), only once a week, and three, not as often as once a week. For Wednesday and Saturday night—and especially for the latter—there was always a greater number reported than for any other night of the week; and there was always a fewer number for Sunday night.

These singular facts were merely demonstrative, however, of the influence of diet on the disease, for on Wednesday and Saturday the inmates of the the coloured department had salt pork or fish and hominy for dinner, the white boys had the same, only on Saturday; and fresh beef (boiled), soup, potatoes, rice, cabbage, and bread, on the other days; and for the evening meal, they had mush and molasses regularly every evening, except Saturday and Sunday evening. On the former of these occasions, they had, instead of the mush and molasses, soup, obtained in the preparation of Sunday's dinner; and on the latter (Sunday evening), they got bread and molasses. The late rising on Sunday morning, which prevails in the institution, might also have contributed to swell the list of Saturday night.

Atmospheric vicissitudes seemed also to exert an influence on the disease. Thus, a sudden fall in the thermometer, or barometer, during the night—either together or separately—always appeared to increase the number of cases. A decrease of temperature seemed especially to produce this effect. I have attempted to represent the influence of these changes in Table III. The apparent exceptions to the statement I have just made, which are noticeable in this table, can be satisfactorily explained in every instance. Thus, many of the exceptions will be found occurring on Wednesday, Saturday, and Sunday nights; but a reason has been already given for the increase of cases on the first and second of these occasions, and for their decrease on the last, which may overbalance the influences of the atmospheric vicissitudes. Thus, it will be observed on the night of the 8th of February, the number of cases decreased, although there was a great fall in the thermometer during that night; but this was Sunday night—the night of all others in which the fewest cases occurred, owing to its being the only night on which they got a dry supper. But even in the majority of these nights (Wednesday, Saturday, and Sunday), where sudden changes have occurred, the influence of such changes has been manifest, although not so much as it was on other occasions. Thus, on the night of Sunday, the 22d of February, the number of cases was increased rather than decreased, as it should have been from the dry supper of that night; but on that night the barometer fell, and thus this instance is proved to be no exception to the rule.

The occurrences of this night, however, furnish another explanation for some of the apparent discrepancies in this table. My only way of representing the thermometrical and barometrical changes between the different days was to give the mean range of each day. These changes may therefore be said to be only representable in an approximate sense. The mean range of the day has thus in some instances indicated an exception to my statement, which in reality had no existence. Thus, in the instance to which I have just been referring, the thermometer rose only 6° during the day of the 22d (Sunday), fell through the night, and was down to 35° in the morning of the 23d. During the 23d it rose so high as really to make the mean of that day much above that of the day previous. Here, then, the table represents the thermometer as rising between the two days, whereas it in reality fell during the intervening night. This fact, it might be thought by some, should destroy all inferences drawn from this table. But this table was merely made to indicate on a glance facts which were observed at the time of their occurrence. It may therefore be said to furnish but an approximation to the truth. If it, however, under such circumstances, justifies the statement I have made—that the number of cases was always increased by a sudden and decided fall in the thermometer and barometer—how much more accurate must that statement in reality be? I could furnish the records of each day for the whole period of five months, and demonstrate, beyond all cavil, the truth of what I have said; but the recital of such dry details would prove neither interesting nor instructive. I have perhaps already dwelt too much on this point; but as I have found fault with others for merely stating vague inferences of what they have seen, it is especially incumbent on me to avoid exposing myself to similar censure. The fact of such sudden changes influencing this disease, may be thought by some never to have required demonstration.

A reference to this table has suggested to my mind another circumstance which should be mentioned. It will be observed that the number of cases steadily and rapidly increased between the 12th and 16th of March. This increase took place in defiance of the weather, and was, at the time, the source of some perplexity to my mind. In the early part of the week previous, I had ordered all the cases to abstain from drinking anything at the evening meal. This had had an appreciable influence on the number of cases reported during that period; but it was not a mode of treatment altogether agreeable to the patients; some of them, therefore, on the evening of the 12th, slipped off and took a good drink at the hydrant, just before going to bed. The success of their stratagem was such as to induce others to follow their example. The number of visitors to the hydrant increased each night, and their fear of detection became less and less, until, on the night of the 16th, they were caught at their libations. The rigid enforcement of my directions showed itself on the 17th; for on the night of that day the number fell off ten.

On the five nights following that of the 17th of March, this table shows still another digression from what I have stated as occurring so uniformly. During these five nights, the number of cases appears to have been small, although considerable change took place in both the thermometer and barometer. The cases in this portion of the table are, however, only from the coloured department, for, during these five days, the watchman was ill, and unable to report the cases in the white department.

Some influence may perhaps be attributable to the occupations of these boys, in the production of the disease; and the difference of occupation in the two departments may serve to explain the greater frequency of free uric acid amongst the white, and its occurrence in combination with the blacks.

The white boys over 12 years were engaged in the light work of making match-boxes, daguerreotype cases, and brushes. The black boys over 12, in driving heavy machinery for making umbrella frames, which required great consumption of muscular strength.

The departments of the whites are heated by steam; those of the blacks by hot air furnaces. The white boys have more playground, and there is a better circulation of air through their part of the inclosure.

The diet of the house consists of coffee, diluted with milk, and sweetened with molasses, and of dry bread for breakfast. The bread is a mixture of Indian, rye, and wheat, well fermented, and sweet.

For dinner they get soup made with beef, cut in large pieces, which is afterwards served to them as meat, with potatoes and turnips, or hominy, rice, or beans. This constitutes the midday meal every day, except on Wednesday and Saturday, in the colored department, and on Saturday in the white side, when codfish or salt pork is served instead of the beef.

For supper they have Indian mush and molasses every day, except on Saturday and Sunday, as before specified. The meals are all devoured with the rapidity usual to children in public institutions.

In the treatment of these cases, I made trial of a number of the remedies which have been recommended for the cure of this disease, with very variable success. In the first instance I, however, put all the cases on the use of the bromide of potassium in 2½ and 3 gr. doses, thrice daily, according as they were above or below 12 years of age. I do not know of this article ever having been employed, before or since that time, for this purpose. I used it solely for the anaphrodisiac effect which I had seen it exert in cases of seminal emissions and masturbation, and thinking that much of the incontinence of urine was due to irritation consequent on masturbation, of which so many of the cases furnished strong evidence of being guilty, I determined to give it a trial.

In nine of the sixty-three it effected a complete cure. Not one of these nine cases wet the bed after the first week of its administration. One of these cases was quite a bad one of the disease; but what was singular, I had no reason to suspect him of masturbation. There were also two others in which there was no reason to suspect this vice. In the rest, there was reason for the suspicion, and two of them confessed to being guilty of it.

There were four cases materially benefited by this remedy, although not entirely relieved. Two of these confessed to being masturbators, and one was suspected of the vice.

In the rest of the cases (namely, 50), it seemed to exert no beneficial effect whatever, although its use was faithfully persevered in for two weeks; and in the cases in which masturbation was most strongly suspected, the tinct. of lupuline was combined with it, without any benefit being effected. I should state, also, that the cold douche on the back, loins, and belly, was employed in all the cases whilst the bromide of potassium was being used. But as the douche had been previously employed without any appreciable improvement whatever in the disease, the success above stated, I think, may be justly attributed to the bromide of potassium.

In the cases (54) which were not cured by this remedy, I next employed the tincture of the chloride of iron in five and three drop doses, thrice daily, and doubled the dose at the end of the first week of its use. I gave this a fair trial of more than six weeks, and combined with it the cold douche at bedtime, and a dry supper of bread only. The number of cases at the end of these six weeks was, however, as great as when I began the use of the iron.

I then tried the treatment by cantharides, and gave all the white boys the tincture of cantharides in five drop doses, repeated three times each day, from the 22d of April to the 11th of May, and during this same period I applied a series of blisters by the cantharidal collodion over the sacrum and pubes of each of the coloured boys. But, at the end of that time—two weeks—I could not point out a single case which had been in any way benefited, although strangury was effected in the majority of them.

Finally, in the second week of May, I established what I considered a more rational plan of treatment. I ordered for each boy suffering with constipation, a dose of magnesia; for those who were affected with worms, turpentine ʒj, with bicarb. of soda, gr. v, three times a day. And I put them all on the belladonna, giving them five drops of Squire's juice, prepared by Bently's process.

I also ordered that they should all have a dry supper of bread alone, as had been previously recommended, and the cold douche. Each boy was made to rise and urinate an hour after retiring for the night. Under this plan, the number of cases diminished with really astonishing rapidity. During two nights, at the end of the first week of its adoption, there was not a single case reported in the whole institution. Such a thing had not occurred before during the whole time they were under my observation.

At the end of May—two weeks after placing them under this treatment—only four cases, besides those who wet their clothes during the day, were reported, and these were somehow suspected of deliberately wetting the bed for the sake of being continued on bread for supper, which they preferred to the mush. I therefore ordered that all the cases which had been under treatment, should have only a small allowance of bread, so as to go to bed hungry. From that time there was not another case, besides those which suffered with daily incontinence, reported to me. And at the end of June, when my term of service expired, the cases had all been without treatment for two weeks, and there was no recurrence of the disease in any of those affected with the nocturnal incontinence alone. I had never expected to cure those who were unable to control their bladders during the day by any of the remedies above enumerated, and only treated them as I did for the purpose of demonstrating the effects of such remedies in this form of the disease. As it was, however, all these cases were benefited by the belladonna and turpentine, where there existed the association of oxyuris vermicularis with the enuresis. Another of these cases had spongy gums and stomatitis, and took with benefit the chlorate of potassa. The other case was idiotic, and on him the belladonna manifested less benefit than on any of the others.

TABLE I.—*Abstract of the Cases of Enuresis occurring*

No.	Name.	Age.	General appearance.	CONDITION OF DIGESTIVE ORGANS.			CONDITION OF URINE.			
				Appetite.	Tongue	Evacuations.	Frequency per diem.	Color.	Sp. gr.	Chemical reaction, sediment, &c.
1	Koehler	17	Stout and hearty	Good	Natural	1 per diem	3 or 4 times	Natural	1010	Slightly acid; no sediment
2	J. McGuire	7	Short and thin	Capricious	Coated	1 per diem	3 or 4 times	Natural amber	1020	Very acid; ur. ac. and ur. amm.
3	T. McGuire	12	Thin & pale	Good	Natural	Not regular	4 or 5 times	Natural amber	1025	Very acid; urate of ammonia
4	Root	..	Short & very hearty	Good	Slight fur	3 per diem	4 times	Natural amber	1020	Acid; no sediment
5	Alex. Gibbs	12	Fair and thin	Variable	Pale	Not regular	3 or 4 times	Natural amber	1020	Acid; no sediment
6	And. Gibbs	8	Pale & thin	Variable	Pale	Not regular	2 or 3 times	Natural	1020	Acid; uric acid sediment
7	Haley	16	Pale & thin	Variable	Slight fur	Not regular	2 or 3 times	Pale	1010	Acid; uric acid
8	Galbraith	15	Short and stout	Good	Pale	Not regular	Wets his clothes	Amber	1015	Acid; uric acid, large crystals
9	Morris	9	Small, thin, and pale	Good	Coated	3 per diem	3 or 4 times	Pale	1012	Acid; uric acid, large crystals
10	Farns	15	Small and feeble	Good	Natural	1 per diem	3 or 4 times	Natural	1020	Acid; uric acid
11	C. Bloomer	13	Thin and shy	Variable	Natural	Not regular	3 or 4 times	Natural	1015	Acid; uric acid and urate of ammo.
12	W. Bloomer	12	Thin but healthy	Good	Natural	1 per diem	3 or 4 times	Natural	1017	Acid; (slightly) uric acid
13	Hartz	16	Large, hearty	Good	Coated	1 per diem	2 or 3 times	Pale	1015	Acid; no sediment
14	Walker	11	Thick set and hearty	Good	Pale	1 per diem	3 or 4 times	Natural	1020	Acid; uric acid
15	Dolin	14	Pale	Good	Natural	1 per diem	3 times	Bright amber	1020	Acid; uric acid small quantity
16	Nesson	14	Healthy	Good	Pale putty	Not regular	2 or 3 times	Pale	1015	Acid; uric acid lozenges
17	Cook	11	Thin	Good	Pale	2 per diem	2 or 3 times	Light amber	1020	Acid; uric acid
18	Falkner	13	Healthy	Good	Coated	Not regular	Every 3 hours	Pale	1012	Acid; ammonia, phos. of mag.
19	Osborne	16	Stout, healthy	Good	Natural	1 per diem	3 or 4 times	Pale	1010	Acid; uric acid
20	Bennett	16	Strumous	Good	Coated	1 per diem	3 or 4 times	Pale	..	No sediment
21	Baker	16	Tall, strumous	Good	Putty	2 per diem	3 or 4 times	Amber	1015	Acid; no sediment
22	Fullerton	11	Thin (red hair)	Good	Natural	1 a week	2 or 3 times	Pale	1018	Acid; uric acid slight
23	Young	12	Healthy	Good	Pale	2 per diem	3 or 4 times	Amber	1012	Very acid; uric acid
24	Price	15	Healthy	Good	Natural	1 or 2 per diem	2 or 3 times	Pale	1012	Very acid; uric acid
25	Johnston	13	Strumous	Good	Natural	1 or 2 per diem	3 or 4 times	Pale	1015	Acid; uric acid
26	McCann	11	Thin	Good	Slight fur	1 per diem	3 or 4 times	Natural	1017	Acid; uric acid
27	Shannon	10	Healthy	Good	Natural	Not regular	3 or 4 times	Natural	1022	Acid; uric acid
28	Porr	18	Pale, thin (idiotic)	Variable	Natural red	2 per diem	Wets his clothes	Pale	1012	Acid; urate of ammonia
29	Callender	11	Strumous	Good	Natural	1 per diem	3 or 4 times	Natural	1013	Acid; uric acid

in the White Department of the House of Refuge.

Special disease.	Frequency of habit.	Appearance of genitalia.	Secret vice.	Remarks.
No ascarides or other dis.	4 or 5 times a week	Natural	None	Cured by bromide of potassium.
Has ascarides	6 or 7 times a week	Natural	None	Cured by belladonna, turpentine, and soda.
No ascarides or other dis.	6 or 7 times a week	Prepuce elongated and red	Denies any	Cured by belladonna and magnesia.
Has ascarides	6 or 7 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna, turpentine, and soda.
No ascarides or other dis.	3 or 4 times a week	Natural	None	Cured by belladonna.
No ascarides or other dis.	4 or 5 times a week	Natural	None	Cured by belladonna and magnesia.
No ascarides or other dis.	5 or 6 times a week	Prepuce and penis elongated	Confesses	Benefited by bromide of potassium.
No ascarides: spongy gums	6 or 7 times a week	Prepuce and penis elongated	Confesses	Benefited by belladonna.
Has ascarides	5 or 6 times a week	Natural	None	Cured by bromide of potassium.
Has ascarides	Once a week	Prepuce and penis elongated	Confesses	Benefited by bromide of potassium.
No ascarides	Once a week	Prepuce and penis elongated	Denies any	Benefited by bromide of potassium.
No ascarides	Once a week	Natural	Denies any	Benefited by bromide of potassium.
No ascarides	1 or 2 times a week	Prepuce and penis very large	Denies any	Cured by belladonna and magnesia.
No ascarides	4 or 5 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna.
No ascarides	5 or 6 times a week	Penis large; has a rupture	Denies any	Cured by belladonna.
Has herpes circinatus	2 or 3 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna and magnesia.
No ascarides	2 or 3 times a week	Natural	Denies any	Cured by bromide of potassium.
Has ascarides	Once a week	Prepuce and penis elongated	Confesses	Cured by bromide of potassium.
No ascarides	2 or 3 times a week	Prepuce and penis elongated	Confesses	Cured by belladonna.
No ascarides	2 or 3 times a week	Prepuce and penis elongated	Confesses	Cured by belladonna.
Has herpes circinatus	2 or 3 times a week	Prepuce and penis elongated	Mast. ev'ry night	Cured by belladonna and magnesia.
Has scabies, no ascarides	Once a week	Prepuce and penis elongated	Confesses	Cured by belladonna.
Has herpes circinatus	1 or 2 times a week	Prepuce and penis elongated	..	Cured by belladonna.
Has had ascarides	1 or 2 times a week	Prepuce and penis reddened	Denies any	Cured by belladonna and turpentine.
Has herpes circinatus	1 or 2 times a week	Prepuce and penis elongated	Confesses	Cured by belladonna.
Has herpes circinatus	1 or 2 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna and magnesia.
Has herpes circinatus	2 or 3 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna and magnesia.
No ascarides	Day and night	Prepuce and penis elongated	Confesses	Benefited by belladonna.
Has herpes & ascarides	1 or 2 times a week	Prepuce and penis elongated	Confesses	Benefited by belladonna.

TABLE II.—*Abstract of the Cases of Enuresis occurring*

No.	Name.	Age.	General Appearance.	CONDITION OF DIGESTIVE ORGANS.			CONDITION OF URINE.			
				Appetite.	Tongue.	Evacuations.	Frequency per diem.	Color.	Sp. gr.	Chemical reaction, *sediment, &c.*
1	J. Cole	10	Thin mulatto	Good	Pale	Constipated	2 or 3 times	Light	..	Saccharine; no sediment
2	Morris	9	Stout, dark	Good	Pale	Not regular	3 or 4 times	Natural	1025	Acid; uric acid and urate of ammon.
3	Banks	12	Stout and healthy	Good	Natural	Constipated	2 or 3 times	Light amber	1024½	Acid; urate of ammonia
4	Robinson	12	Markedly strumous	Good	Slight fur	Not every day	3 or 4 times	Natural	1023	Acid; urid acid
5	Harris	13	Healthy	Good	Natural	Once a day	1 or 2 times	Natural	1019	Saccharine, acid; no sediment
6	Clark	9	Healthy	Good	Pale	Not regular	2 or 3 times	Natural	1020	Acid; no sediment
7	J. Brown	14	Healthy, large lips	Variable	Pale	Regular	2 or 3 times	Natural	1021	Acid; no sediment
8	Eates	16	Dark, stout, healthy	Good	Slight fur	Twice a day	Twice a day	Natural	1019	Acid; no sediment
9	Wallace	..	Stout mulatto	Not good	Pale	4 or 5 a day	2 or 3 times	Natural	1024	Acid; no sediment
10	Chris. Field	14	Large, stout	Variable	Pale	Twice a day	2 or 3 times	Natural	1018	Acid; no sediment
11	Cope	11	Short, stout, and hearty	Good	Pale	Once a day	Seldom	Light amber	1018	Acid; urate of ammonia
12	Thomas	12	Emaciated	Variable	Natural	Regular	3 or 4 times	Light	1017	Saccharine, acid; urate of ammon.
13	R. Johnson	8	Short, hearty	Variable	Slight fur	Twice a day & painful	Twice a day	Natural	1016	Acid; no sediment
14	Gilmore	10	Short and thin	Good	Pale	Twice a day	3 times	Natural	1019	Acid; uric acid
15	Js. Brown	14	Healthy	Good	Coated	Once a day	3 times	Natural	1021	Acid; uric acid
16	G. Hackett	10	Stout, healthy	Good	Pale	Once a day	Twice a day	Natural	1026	Acid; uric acid
17	Casey	14	Light, healthy	Good	Natural	Constipated	3 or 4 times	Natural	1027	Acid; uric acid
18	D. Palmer	14	Thin, dark	Good	Pale	Once or twice	2 or 3 times	Natural	..	Acid; uric acid
19	Samons	14	Healthy	Good	Natural	Constipated	2 or 3 times	Natural	1018	Acid; uric acid
20	C. Hardy	13	Light and thin	Good	Pale	Constipated	Once a day	Natural	1020	Saccharine; no sediment
21	Pitts	11	Large and healthy	Good	Natural	Constipated	Twice a day	Natural	1010	Acid; no sediment
22	Sam. Johnson	10	Short, hearty	Good	Natural	Regular	3 or 4 times	Natural	1016	Acid; uric acid
23	John Baily	16	Stout, hearty	Good	Natural	Regular	3 or 4 times	Natural	1027	Acid; no sediment
24	Francis Stevens	8	Short, hearty & straight-haired	Good	Natural	Regular	Wets himself during the day	Light	1020	Acid; no sediment
25	Bunce	14	Large and dark	Good	Natural	Constipated	2 or 3 times	Natural	1020	Acid; no sediment
26	Wm. Halgaman	10	Thin	Good	Natural	Twice a day	3 times	Natural	1023	Acid; no sediment
27	Riley	8	Stout, hearty	Good	Natural	2 or 3 a week	2 or 3 times	Natural	1020	Acid; urate of ammonia
28	Alexander	13	Light, stout	Good	Natural	3 times a day	Wets his clothes	Natural	1019	Acid; urate of soda
29	A. Lopeman	15	Healthy mulatto	Good	Natural	Twice a week	3 or 4 times	Natural	1020	Acid; uric acid
30	Jas. Bond	..	Dark, healthy	Good	Coated	Not regular	2 or 3 times	Natural	1021	Acid; no sediment
31	Shafer	18	Good	Good	Coated	Regular	3 or 4 times	Natural	1015	Acid; urate of ammonia
32	John Lea	15	Tall & healthy	Good	Coated	2 or 3 times a day	2 or 3 times	Natural	1020	Acid; uric acid
33	Jos. Oliver	13	Thin	Good	Coated	Regular	3 or 4 times	Natural	1019	Acid; no sediment
34	Walters	12	Stout, dark	Good	Coated	Regular	4 or 5 times	Natural	1020	Acid; no sediment

in the Colored Department of the House of Refuge.

Special disease.	Frequency of habit.	Appearance of genitalia.	Secret vice.	Remarks.
No ascarides or other dis.	2 or 3 times a week	Prepuce much elongated	Denies any	Cured by bromide of potassium.
Has ascarides	4 or 5 times a week	Prepuce much elongated	Denies any	Cured by belladonna, magnesia, and turpentine.
Has passed lumbricoid	4 or 5 times a week	Prepuce much elongated	Denies any	Cured by belladonna, magnesia, and turpentine.
No ascarides or other dis.	1 or 2 times a week	Prepuce much elongated	Denies any	Cured by bromide of potassium.
No ascarides or other dis.	3 or 4 times a week	Prepuce much elongated	Denies any	Cured by belladonna.
No ascarides or other dis.	3 or 4 times a week	Prepuce much elongated	Denies any	Cured by belladonna and magnesia.
No ascarides or other dis.	5 or 6 times a week	Prepuce much elongated	Confesses	Cured by belladonna.
Has ascarides	5 or 6 times a week	Penis and prepuce elongated	Denies any	Cured by belladonna and turpentine
Has cough, diarrhœa, & ascarides	5 or 6 times a week	Penis and prepuce elongated.	Denies any	Cured by belladonna and turpentine.
Has ascarides	4 or 5 times a week	Small	Denies any	Cured by belladonna and turpentine.
Has ascarides	Every night	Prepuce and penis elongated	Strongly suspected	Cured by belladonna and turpentine.
Has ascarides	3 to 5 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna and turpentine.
Has ascarides	5 or 6 times a week	Prepuce and penis elongated	Confesses	Cured by belladonna, turpentine, and magnesia.
No ascarides	Once a week	Prepuce and penis elongated	Confesses	Cured by bromide of potassium.
No ascarides	Once a week	Prepuce and penis elongated	Denies any	Cured by belladonna.
No ascarides	Once a week	Prepuce and penis elongated	Denies any	Cured by belladonna.
Has ascarides	Once a week	Prepuce and penis elongated	Denies any	Cured by bromide of potassium.
Has ascarides	Once or twice a week	Prepuce and penis elongated	Masturbates	Cured by belladonna and turpentine.
Has ascarides	4 times a week	Prepuce and penis elongated	Masturbates	Cured by belladonna, turpentine, and magnesia.
No ascarides	Occasionally	Prepuce and penis elongated	Denies any	Cured by belladonna, turpentine, and magnesia.
Has ascarides	4 or 5 times	Natural	None	Cured by belladonna, turpentine, and magnesia.
No ascarides	2 or 3 times a week	Prepuce and penis elongated	Confesses	Cured by belladonna.
Has ascarides	Once a week	Natural	None	Cured by belladonna and turpentine.
Has ascarides	3 or 4 times a week	Prepuce and penis elongated	Denies any	Benefited by belladonna.
Has ascarides	3 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna, turpentine, and magnesia.
No ascarides	Once a week	Natural	None	Cured by belladonna.
No ascarides	Twice a week	Small	None	Cured by belladonna.
Has ascarides	Once a week	Prepuce much elongated	Denies any	Benefited by belladonna.
No ascarides	Twice a week	Natural	None	Cured by belladonna and magnesia.
No ascarides	Occasionally	Natural	None	Cured by belladonna and magnesia.
No ascarides	Occasionally	Natural	None	Cured by belladonna and magnesia.
No ascarides	Twice a week	Penis very large	Denies any	Cured by belladonna and magnesia.
Has ascarides	3 times a week	Prepuce and penis elongated	Denies any	Cured by belladonna and turpentine.
Has ascarides	3 times a week	Natural	None	Cured by belladonna and magnesia.

It will be remarked that the cases I have reported were confined exclusively to the male departments of the institution. No complaints were made to me at the time my attention was called to the disease amongst the boys, of its existence in the girls' department. This struck me at the time as somewhat singular, and I made inquiry on the subject, and, much to my surprise, I found that the disease was really confined to the boys, for there were but two out of the whole number of girls (about 80) in the house ever guilty of wetting the bed. These did it so seldom as not to be the source of annoyance or inconvenience. The average age of the girls was somewhat greater than that of the boys, and their general condition and health far better. I had very seldom occasion to prescribe for one of them, especially in the white department, during the whole six months. As a class, they were remarkably healthy, stout and ruddy. They performed the household duties, such as cooking, cleaning, washing, ironing, mending and making clothes for the whole house. They were occupied about five hours each day in school—had three hours for amusement, chiefly jumping of rope and swinging in the yard. They indulged in a great deal of singing at all times. They had the same diet as the boys. Morally they were no better than the boys—many of them, even of the youngest, had led dissolute lives. I had no way of determining with anything like an approximation to the truth the frequency or even the existence of masturbation amongst them. A vaginal examination in itself, if justified by my own conscience, or allowed by the Managers, would not have determined with accuracy the fact. I also made no examination of the urine in this department with the view of determining a cause of the difference between the two sex—my time was too much occupied for the purpose, with my investigations in the male department. My researches, therefore, as regards the influence of sex in this disease, were not as complete as might be desired, but they are at least in confirmation with the most generally expressed views, that the disease is most common amongst boys.

Dr. CONDIE said that the communication of Dr. Hewson was a most interesting one on a most interesting subject. Dr. Condie was pleased that so favourable an opportunity for the careful study of incontinency of urine, as it occurs in children, had been afforded the gentleman, and that he had been enabled so successfully to improve it. His communication exhibits the first attempt, so far as Dr. Condie was aware, to substitute facts for surmises, the results of close observation for mere hypothesis, in respect to the circumstances under which enuresis is met with in childhood, and the particular conditions of the patient with which it is associated.

Dr. Condie had been engaged for many years in an investigation of the same subject, but under circumstances far less favourable to the accuracy of the results than those which have occurred to Dr. Hewson. The cases observed by Dr. Condie were not placed under so close and careful observation as those of Dr. Hewson; for some of the most important particulars connected with them he had to depend upon the reports of parents, and often of ignorant and unfaithful nurses. He was pleased to find, however, that the results of his investigations, imperfect as they were in accuracy, corresponded in their general features with those which might be drawn from the cases observed by Dr. Hewson.

Dr. Condie, contrary to what he had anticipated when he began the investigation, found that incontinence of urine was much more common in boys than in girls. So far as his observations went, the disease or infirmity, whichever it may be, was less frequent among children at home than among those congregated in public institutions, boarding-schools for young boys, etc. In some of the cases observed by Dr. Condie, the incontinence was experienced throughout the whole twenty-four hours; the children being unable to control for a moment the inclination to urinate when it occurred, during the day or at night, and in the majority of these patients the inclination was experienced at much shorter intervals than is usual in children. In the majority of cases, the incontinence was experienced only during the night, and when the patient slept, sometimes every night, at others only occasionally. Dr. Condie had found the disease more common among children badly brought up—who were neglected in both their hygienic and moral training. In some cases, nocturnal incontinence of urine would appear to be the result of a careless, lazy, filthy habit; in such it might be cured by a cautious disciplinary treatment; but in the majority of cases, the incontinence was the result of causes altogether beyond the control of either the parents or the children; it was, properly speaking, a disease.

In cases of nocturnal incontinence, Dr. Condie had found the most effectual remedy to be the belladonna. He had frequently combined it with one or other of the chalybeate preparations, having, in numerous cases, found the enuresis to be connected with a cachectic condition of the system, or with symptoms indicating an impoverished state of the blood. In those cases in which the incontinence occurs in the day as well as by night, he had employed the tincture and extract of nux vomica, and occasionally strychnine, and though he could not boast of any great success in the treatment of such cases, yet, from the remedies just mentioned, he was certain that he had derived more advantage than from any other, and he had tried a host.

On one point the observations of Dr. Condie led to a very different result from those of Dr. Hewson; he alluded to the condition of the urine in children affected with enuresis. In thirty-two cases in which the urine was submitted to a careful and accurate examination, the saline ingredients, particularly the urates, as well as uric acid, were found to be deficient; there was an excess of the watery portion. This was more strikingly the case in respect to the urine of such of the children as were troubled with incontinence of urine by day and by night. Dr. Condie was induced to undertake the examination of the urine in consequence of the statement of Prout that in enuresis the urine contains an excess of lithic acid and its compounds. Willis had already, however, shown that the urine of those labouring under enuresis is of lower specific gravity than in health, colourless and watery, and deficient in the characteristic animal ingredients. Others have noticed the same fact, and, in the cases where the urine is more copious than in children generally, and the calls to pass it are at all times frequent, and uncontrollable for even an instant, they have described the affection as an infantile insipid diabetes.

Inability to Distinguish Colours.—Dr. HAYS stated that he had recently met with a case of inability to distinguish colours, a brief notice of which might interest the fellows of the College. The case was interesting in two points of view: *First*, as it belonged to a class of cases of which but very few had hitherto been recorded, viz., in which the inability did not exist as a congenital defect, but was the result of disease; and, *secondly*, because it confirmed the law, pointed out some years since by the speaker, as existing in regard to these cases.

He had shown, 1st, that this defect may exist to such a degree that shades only could be distinguished, the individual having no perception of colour.

2d. In the next degree, the patient can distinguish only a single colour, and this is always yellow.

3d. In the next degree, the individual can distinguish two colours, which are always yellow and blue.

4th. In the next degree, the patient can distinguish three colours, and these are always yellow, blue, and red.

This was exemplified in the case of Mary Bishop, the particulars of which were recorded in the *American Journal of Medical Sciences*, for Aug., 1840, and confirmed by a comparison of numerous cases. (See *Lawrence's Treatise on Diseases of the Eye*, edited by the speaker, pp. 637–648, Phila., 1854.)

The subject of the present case was a man 35 years of age, who stated that, after an attack of fever and ague followed by violent attacks of colic, he had lost his sight. When he first began to regain this faculty he could only discern shades, but could not distinguish a single colour. As his sight improved, he noticed first the blue lining of his carriage, and some time afterwards was delighted to find that he could distinguish the pink lining of his coat.

When seen by Dr. H. he could distinguish three colours—yellow, blue, and red—but he was unable to state when he had regained his ability to distinguish the first, as that colour had not been presented to his attention. The three colours mentioned were the only ones he could distinguish; when a bright red and a bright green were placed side by side before him, he could not distinguish one from the other, but if one were of a deeper shade than the other, he readily detected this difference.

New Apparatus for Fracture of the Thigh.—Dr. HENRY HARTSHORNE made the following remarks: Having been indulged with the attention of the